



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,517	10/05/2003	Chi-Chin Lien	MTKP0095USA	2516
27765 7590 08/27/2007 NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER DESIR, JEAN WIGEL	
			ART UNIT 2622	PAPER NUMBER
			NOTIFICATION DATE 08/27/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
Patent.admin.uspto.Rcv@naipo.com
mis.ap.uspto@naipo.com.tw

Office Action Summary	Application No.	Applicant(s)	
	10/605,517	LIEN, CHI-CHIN	
	Examiner	Art Unit	
	Jean W. Désir	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuboi (US 6,912,254) in view of Suzuki (US 6,243,140).

Claim 1:

Tsuboi discloses:

A method for video decoding (Fig. 7, col. 6 lines 33-35) in a video decoding/de-interlacing display apparatus, utilizing a storage device having four frame buffers (Fig. 7 item 2), the method comprising:

(a) decoding video data of a next picture (see Fig. 7 item 1);

(b) if the decoded next picture is a B picture, buffering the decoded video data of the next picture into a frame buffer of the storage device not stored with a reference picture nor a present display picture nor a previous display picture (see Fig. 7 items 1, 2, col. 11 line 41 to col. 12 line 27);

and (c) if step (b) is not applicable, buffering the decoded video data of the next picture into a frame buffer of the storage device stored with the previous display picture (see Fig. 7 items 1, 2, col. 11 line 41 to col. 12 line 27, col. 8 lines 11-21);

Art Unit: 2622

the difference between the claimed invention and Tsuboi's disclosure is that Tsuboi does not explicitly teach de-interlacing. However, video de-interlacing is a notoriously well known technique in the art useful in the generation of progressive video data- as evidence see Suzuki at Figs. 2A, 2B item 210, col. 3 lines 60-61; an artisan would be motivated to modify Tsuboi's disclosure and implement the existing de-interlacing technique, because the technique is readily available to the designer and progressive video data would be advantageously obtained. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claim 2 is disclosed, see Tsuboi at col. 12 lines 3-27, 40-50.

Claims 3, 4 are disclosed, see Tsuboi at col. 7 lines 24-32, col. 8 lines 11-16.

Claim 5:

Tsuboi discloses:

A method for video decoding (Fig. 7, col. 6 lines 33-35) in a video decoding/de-interlacing display apparatus, utilizing a storage device having four frame buffers (Fig. 7 item 2), the method comprising:

(a) decoding video data of a next picture (see Fig. 7 item 1);

and (b) if the decoded next picture is a reference picture, buffering the decoded video data of the next picture into a frame buffer of the storage device not stored with the last decoded reference picture nor a present display picture (see Fig. 7 items 1, 2, col. 12 lines 3-27, 40-50);

the difference between the claimed invention and Tsuboi's disclosure is that Tsuboi does not explicitly teach de-interlacing. However, video de-interlacing is a notoriously well known technique in the art useful in the generation of progressive video data- as evidence see Suzuki at Figs. 2A, 2B item 210, col. 3 lines 60-61; an artisan would be motivated to modify Tsuboi's disclosure and implement the existing de-interlacing technique, because the technique is readily available to the designer and progressive video data would be advantageously obtained. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claims 6, 7 are disclosed, see Tsuboi at col. 7 lines 24-32, col. 8 lines 11-16.

Claim 8 is disclosed, see Tsuboi at col. 11 line 41 to col. 12 line 27.

Claim 9 is disclosed, see Tsuboi at col. 11 line 41 to col. 12 line 27, col. 8 lines 11-21.

Claim 10:

Tsuboi discloses:

- a video decoder, as claimed, see Fig. 7 item 1;

- a storage device, as claimed, see Fig. 7 item 2;

- a controller coupled to the video decoder, see Fig. 7 item 5;

the difference between the claimed invention and Tsuboi's disclosure is that Tsuboi does not explicitly teach an interlace/progressive converter for de-interlacing as claimed. However, video de-interlacing (or interlace/progressive converter) is a notoriously well known technique in the art useful in the generation of progressive video data- as evidence see Suzuki at Figs. 2A, 2B item 210, col. 3 lines 60-61; an artisan

would be motivated to modify Tsuboi's disclosure and implement the existing de-interlacing technique, because the technique is readily available to the designer and progressive video data would be advantageously obtained. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claim 11 is disclosed, see Tsuboi at Fig. 7 items 1, 2, col. 11 line 41 to col. 12 line 27.

Claim 12 is disclosed, see Tsuboi at Fig. 7 items 1, 2, col. 12 lines 3-27, 40-50.

Claim 13 is disclosed, see Suzuki at Fig. 2B items 210, 205.

Claim 14 is disclosed, see Suzuki at Fig. 2B items 210, 201, Tsuboi at Fig. 7 item 2.

Claim 15 is also disclosed by the above implementation, because Tsuboi and/or Suzuki teach different kinds of pictures (see Tsuboi at col. 13 lines 56) which are interpreted as included film or telecine picture.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean W. Désir whose telephone number is (571) 272 7344. The examiner can normally be reached on 5/4/9 - First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272 7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD
Aug. 18, 07



LIN YE
SUPERVISORY PATENT EXAMINER